

# **The Long-Term Implications of Current Defense Plans: Detailed Update for Fiscal Year 2004**

**Congressional Budget Office  
February 2004**



2/12/2004

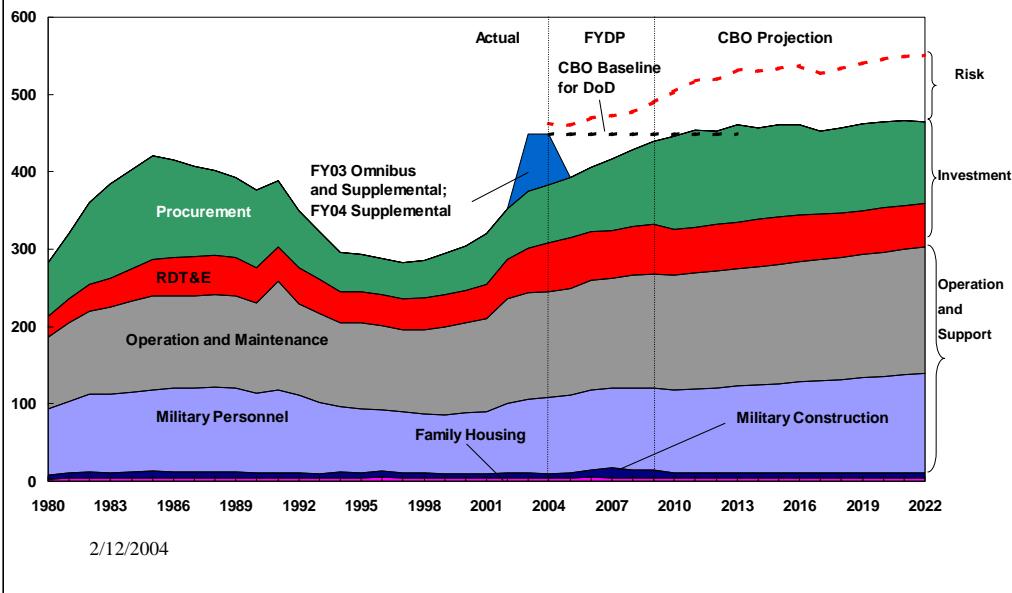
- In January 2003, the Congressional Budget Office (CBO) published *The Long-Term Implications of Current Defense Plans*, which was based on the fiscal year 2003 budget and the Department of Defense's Future Years Defense Program (FYDP) of that same year. CBO updated that analysis in July 2003; its publication *The Long-Term Implications of Current Defense Plans: Summary Update for Fiscal Year 2004* revised CBO's earlier work to take into account changes incorporated in the President's budget for fiscal year 2004 and the 2004 FYDP.
- Because it was a summary, the July 2003 paper omitted many of the detailed data displays contained in CBO's January 2003 study. This briefing updates those omitted displays consistent with the 2004 FYDP. The briefing does not incorporate changes to the FYDP resulting from Congressional action on the President's fiscal year 2004 budget request.
- The updated displays differ in some instances from those contained in CBO's January 2003 study. For example, the updated displays of investment spending for each of the military services provide historical data from 1980 on; the corresponding displays in the January 2003 study began with data for 2002. In some cases, corrections to CBO's historical database of procurement quantities and spending have caused changes; for example, procurement spending on the C-5 transport plane during the early 1980s is corrected in this update. And in many instances the color schemes used in the updated displays differ from those in the corresponding versions published in CBO's January 2003 study.

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**Figure 1-1 Updated.**

**Past and Projected Resources for Defense**

(Billions of 2004 Dollars of Obligational Authority)

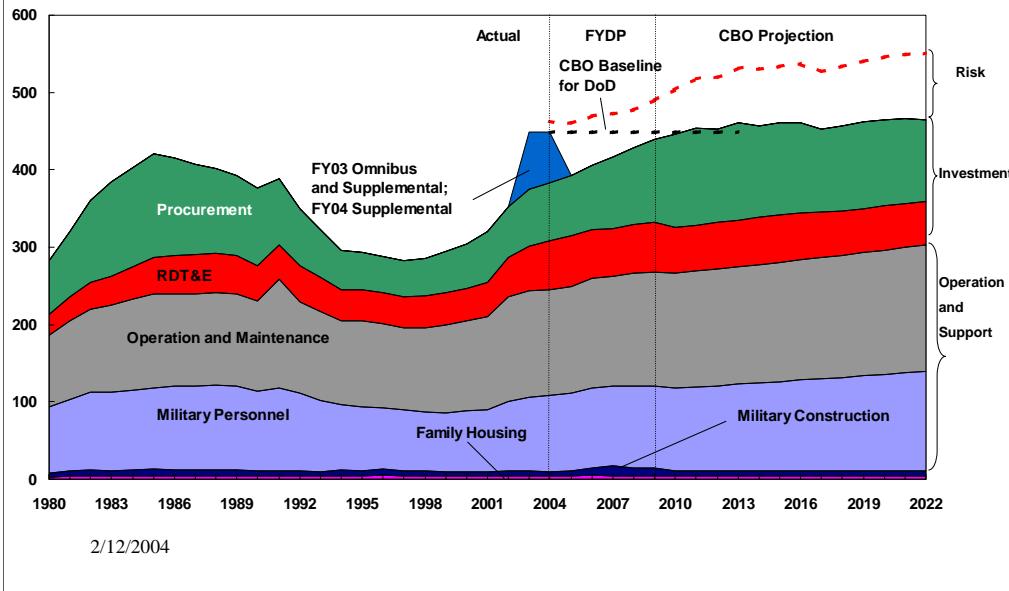


- This chart updates Figure 1-1 in CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. It shows total obligational authority (TOA) for the Department of Defense (DoD) for the 1980-2022 period. TOA for defense grew rapidly from the early to mid-1980s, reaching a peak of \$420 billion in 1985 (all funds are in inflation-adjusted 2004 dollars). Reflecting the end of the Cold War, TOA then generally declined during the late 1980s and into the 1990s, reaching about \$283 billion in 1997.
- DoD's TOA then began to rise, reaching \$304 billion by 2000. It has grown even more rapidly in recent years as U.S. forces have become engaged in operations in Afghanistan and Iraq. In 2003, DoD's TOA reached \$449 billion, including \$74 billion in supplemental funding.
- The 2004 Future Years Defense Program (FYDP)—on which CBO based the projections shown in this briefing and in its July 2003 report—anticipated that defense resources (excluding supplemental appropriations) would rise from \$383 billion for 2004 to \$439 billion for 2009.
- Including supplemental appropriations for 2004, DoD's obligational authority will be about \$450 billion, or approximately the same amount that the Congress appropriated for DoD in 2003.

**Figure 1-1 Updated (Continued).**

**Past and Projected Resources for Defense**

(Billions of 2004 Dollars of Obligational Authority)

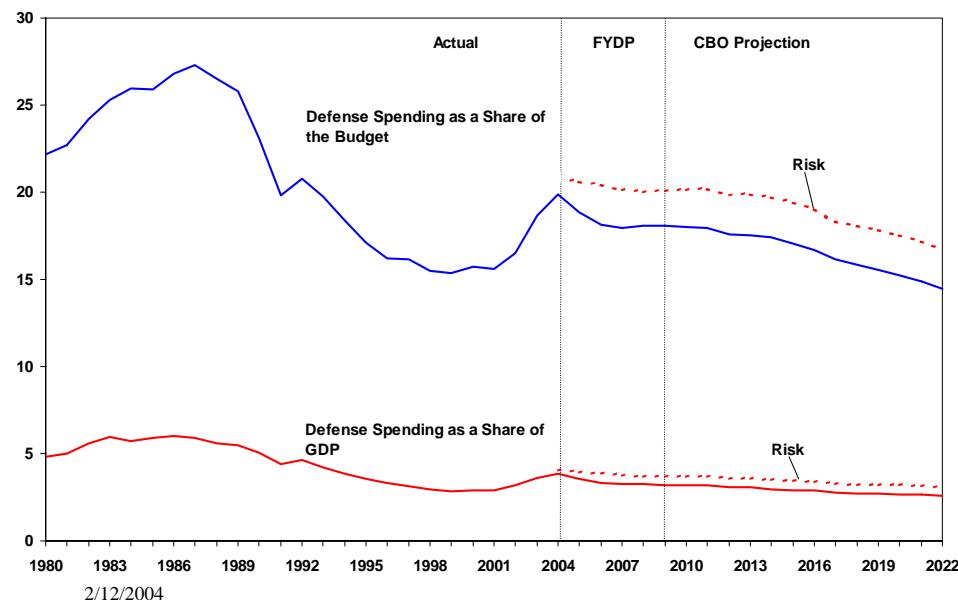


- If the program in the 2004 FYDP was carried out as currently envisioned, the demand for defense resources, excluding needs for contingencies, would average \$458 billion a year between 2010 and 2022, CBO projects—or about \$75 billion more than the 2004 request and about \$10 billion more than the funding DoD received for 2004.
- That projection uses DoD's estimated costs for its planned programs and, consistent with the 2004 FYDP, excludes costs for continued operations in Afghanistan and Iraq and for other activities conducted as part of the global war on terrorism.
- CBO also made a "cost risk" projection (shown by the dashed red line in the figure). CBO projects that resource demands including cost risk will average about \$473 billion a year through 2009 and about \$533 billion between 2010 and 2022. Those values are about 12 percent and 16 percent higher than the amounts without cost risk. Assumptions underlying the cost risk projection include the following:
  - Costs for weapons programs grow as they have since the Vietnam War;
  - Operating costs for major equipment grow as they have over the past two decades; and
  - The United States continues to conduct military operations overseas as part of the continuing global war on terrorism.

**Figure 1-2 Updated.**

**Defense Spending as a Share of the Federal Budget and GDP**

(Percent)

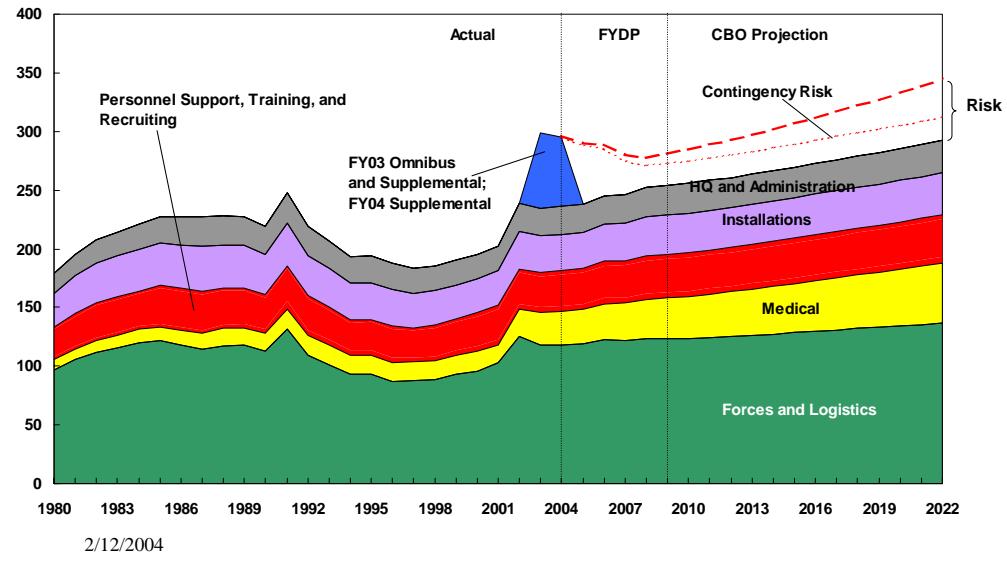


- This chart updates Figure 1-2 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. It compares past and projected spending for DoD with overall federal spending and the size of the U.S. economy.
- The same historical pattern characterizes DoD's spending measured as a share of federal expenditures or of GDP. Both shares grew through the early 1980s. DoD's share of GDP reached a high point in 1986, while its share of federal spending peaked in 1987. The shares declined thereafter, reaching a low point in 1999.
- Trends in the shares during the period of DoD's plan and of CBO's projection are also similar. Both shares grow through 2004 but begin a gradual and steady decline thereafter, with or without cost risk.
- The share of GDP attributable to defense spending falls because projected real (inflation-adjusted) increases in GDP outpace the increases projected for defense outlays.
- DoD's share of federal spending declines because real increases projected in mandatory spending for programs such as Social Security and Medicare outpace increases projected for defense spending.

**Figure 2-1 Updated.**

**Spending for Operation and Support**

(Billions of 2004 Dollars of Obligational Authority)

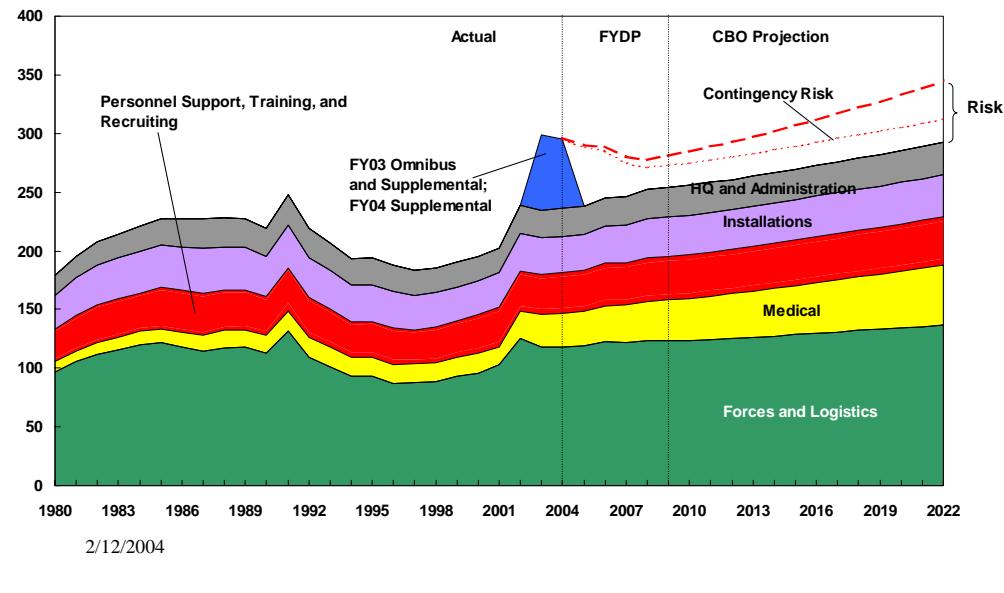


- This chart updates Figure 2-1 in CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. Funds to support DoD's operations composed about two-thirds of the defense budget in 2004. Those funds pay for the salaries and benefits of DoD's military, civilian, and contractor employees; the operating costs of the military's equipment; and the costs of operating and maintaining defense facilities.
- DoD's plans anticipate that funding for operation and support (O&S) will grow from \$236 billion in 2004 (excluding supplemental appropriations) to \$254 billion by 2009.
- On the basis of those plans, CBO projects that demands for O&S funding will continue to rise after 2009, reaching a total of \$292 billion a year by 2022 (the end of CBO's projection period). Those increases result from:
  - Health care costs, which have grown rapidly in the past and which CBO projects will nearly double over the 2004-2022 period, growing from \$28 billion in 2004 to \$52 billion in 2022; and
  - Real pay raises, which if continued through 2022 at the rate of DoD's planned raises through 2009 would cost an additional \$36 billion by the end of the projection period.

**Figure 2-1 Updated (Continued).**

**Spending for Operation and Support**

(Billions of 2004 Dollars of Obligational Authority)



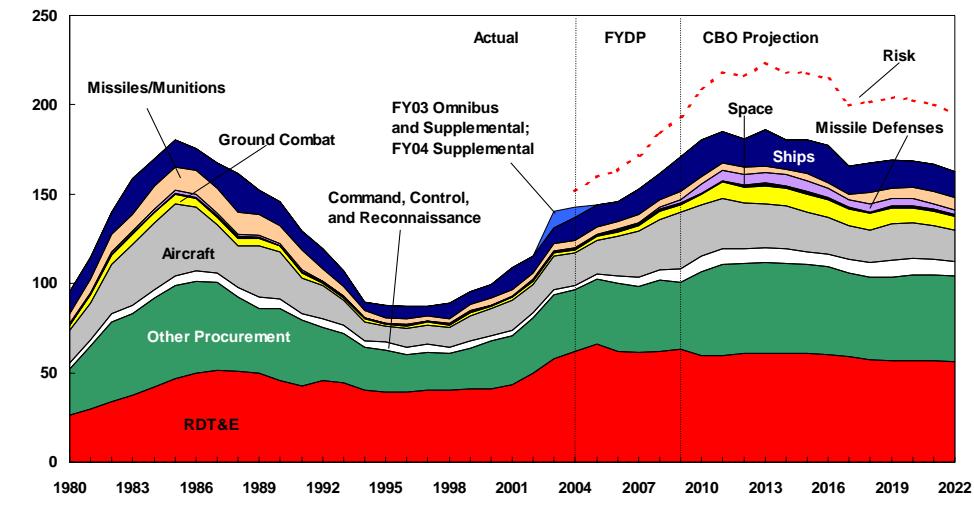
- As the dashed red lines in the figure show, there are risks that could cause growth in the demand for O&S resources to be greater than DoD and CBO have anticipated. Those risks include:

- More rapid growth than expected in DoD's health care costs—that is, at a pace consistent with the upper end of current projections for increases in costs for the health care sector of the U.S. economy as a whole (\$13 billion of cost risk in 2022);
- Continued growth in costs for personnel support (\$1 billion of cost risk in 2022);
- Continued growth in the costs of operating aging as well as new, more complex equipment (\$14 billion of cost risk in 2022); and
- Continued involvement by the United States in contingency operations, such as those in Afghanistan and Iraq, and other operations associated with the global war on terrorism (\$20 billion of cost risk in 2022).

**Figure 3-1 Updated.**

**Spending for Investment by Budget Account and Weapon Type**

(Billions of 2004 Dollars of Total Obligational Authority)



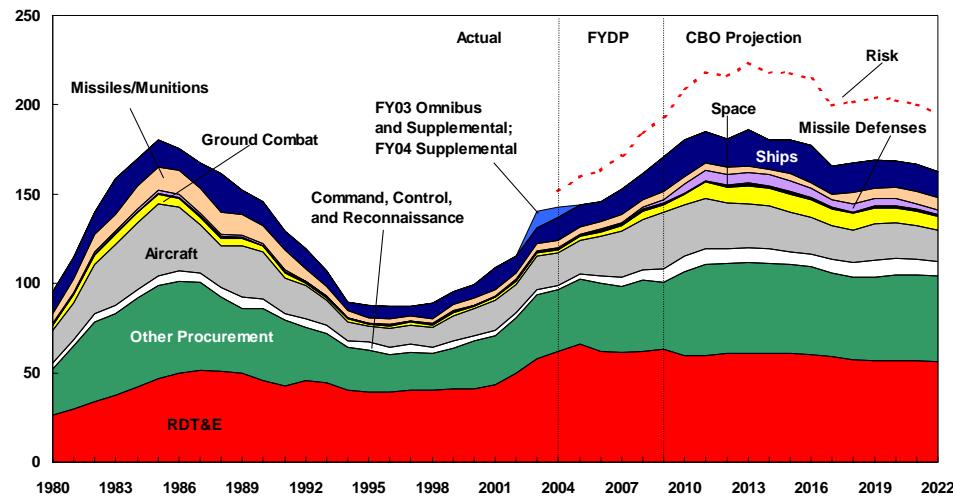
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- This chart updates Figure 3-1 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. It provides a breakout of the one-third of DoD's budget (about \$137 billion in 2004) allocated to investment, which funds development and procurement of DoD's weapon systems.
- The 2004 FYDP anticipated that investment spending would grow to \$171 billion by 2009—about 25 percent more spending than in 2004. On the basis of that plan, CBO projects that investment resources will continue to grow, reaching about \$186 billion by 2013, and then decline. Over the 2010-2022 period, under the assumption that weapons costs do not grow as they have historically, investment demands would average about \$175 billion a year.

**Figure 3-1 Updated (Continued).**

**Spending for Investment by Budget Account and Weapon Type**

(Billions of 2004 Dollars of Total Obligational Authority)



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- That projection is larger than the one reported in CBO's January 2003 study. Over the 2010-2020 period—the years common to both projections—the investment resources in CBO's current projection average about \$25 billion a year more. Most of that increase is associated with:

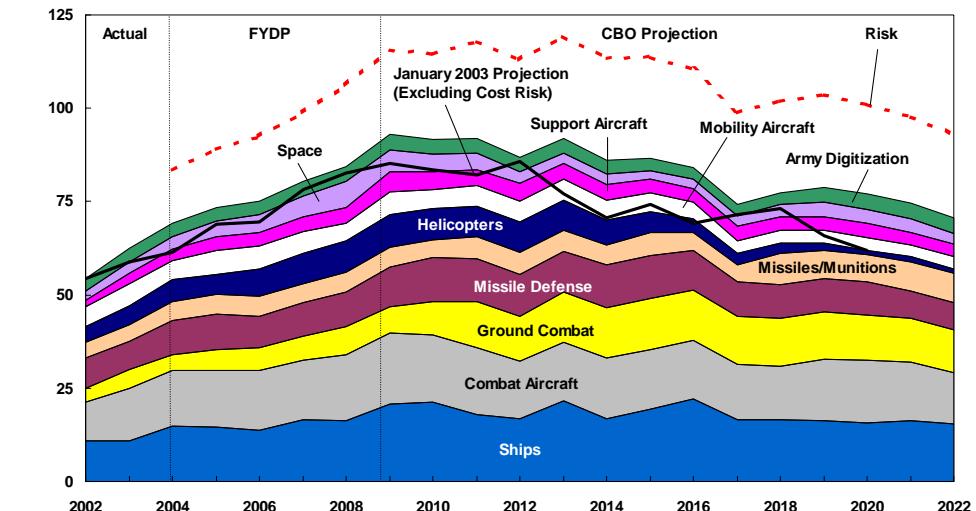
- Increases in investment spending by the Army, including additional spending on its Future Combat System (\$9 billion a year);
- Increases in defense agency funding (\$8 billion a year), including a new transformation-related RDT&E account (\$5 billion a year).

- If the costs of weapons grow in the future as they have over the past 30 years, resource requirements for planned purchases in 2009 could equal \$194 billion, or about 13 percent more than the 2009 value without cost growth. With cost growth, funding during the 2010-2022 projection period could average almost \$210 billion—about 20 percent more than average investment resources without cost growth.

**Figure 3-2 Updated.**

**Projected Funding for Top Investment Programs**

(Billions of 2004 Dollars of Obligational Authority)



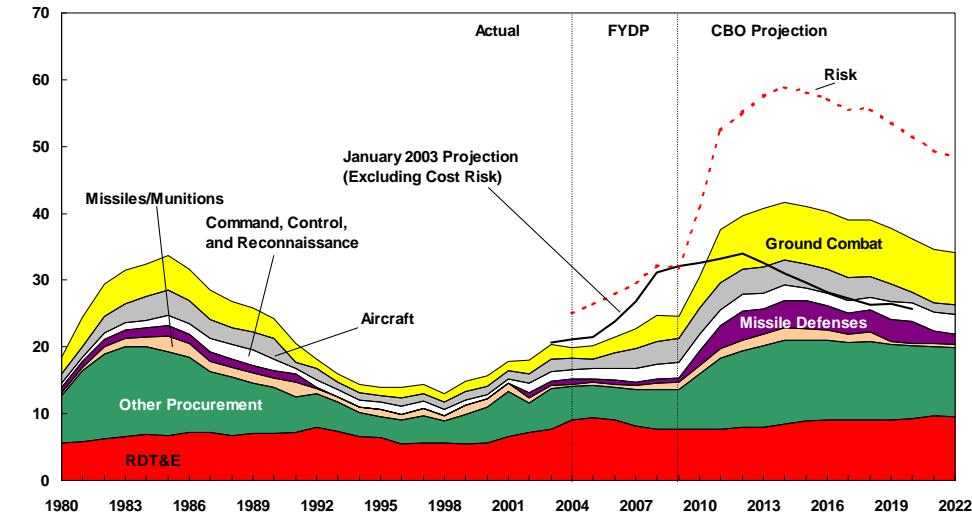
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- This chart replaces the bottom panel of Figure 3-2 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. About half of DoD's investment funding is associated with 10 categories of programs. Over the entire period shown in the graph (2002 to 2022), average annual spending on those "top 10" program categories equals about \$80 billion.
- Almost \$17 billion of that amount pays for the Navy's ship purchases. Fixed-wing combat aircraft in the Air Force, Navy, and Marine Corps account for about \$16 billion of the total. Army and Marine Corps ground combat equipment accounts for another \$10 billion, as does spending on missile defenses.
- If costs grow as they have historically, average annual resource needs for those top programs will rise to about \$105 billion—equaling cost growth of about 30 percent (see the dashed red line displayed in the figure).
- The specific factors that CBO used to produce that cost risk estimate are taken from an analysis of data from DoD's selected acquisition reports (SARs), performed by the RAND Corporation.

**Figure 3-3 Updated.**

**Past and Projected Army Spending for Investment**

(Billions of 2004 Dollars of Obligational Authority)

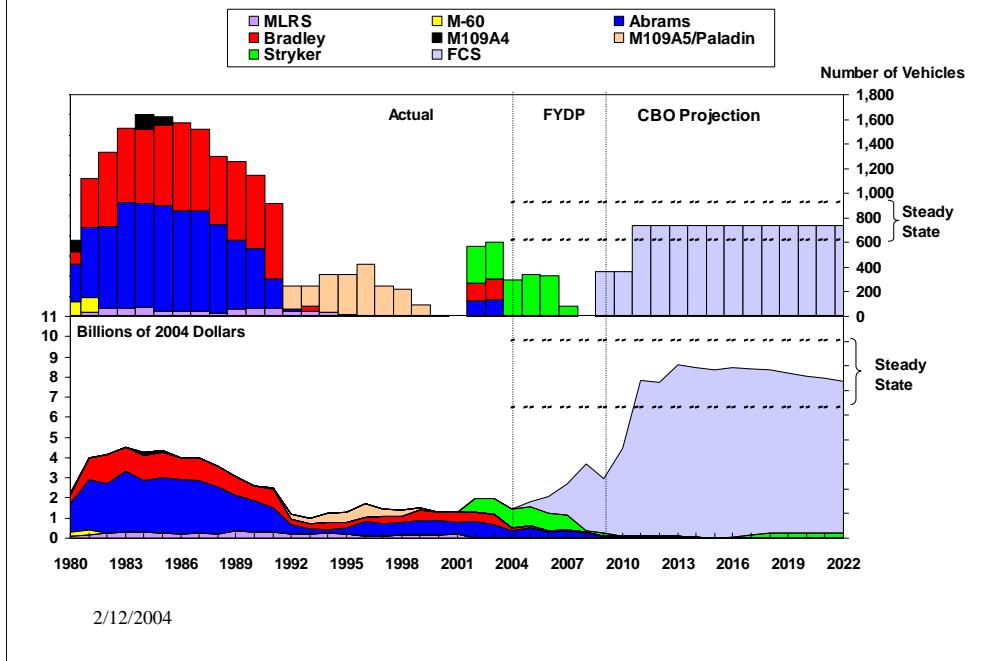


2/12/2004

- This chart updates Figure 3-3 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. CBO projects that if current plans were carried out, by 2012 the Army's investment spending would exceed its previous peak, in 1985, of \$34 billion, and by 2014 it would reach a new peak of \$42 billion. Spending would decline thereafter, reaching about \$34 billion by 2022.
- CBO's projection for the Army's investment spending over the 2010-2020 period averages about \$38 billion annually, or about \$9 billion more than in the January 2003 projection. That increase occurs despite a number of changes in the Army's plans, including:
  - Delaying production of the Comanche reconnaissance helicopter from 2005 to 2007 and cutting the number to be purchased;
  - Terminating upgrade programs for the Army's current fleet of ground combat vehicles (including Abrams tanks and Bradley fighting vehicles);
  - Delaying the start of procurement and reducing annual production of the Future Combat System, which is intended to replace current ground combat equipment; and
  - Transferring funding for the destruction of chemical munitions out of the Army's budget.

**Figure 3-4 Updated.**

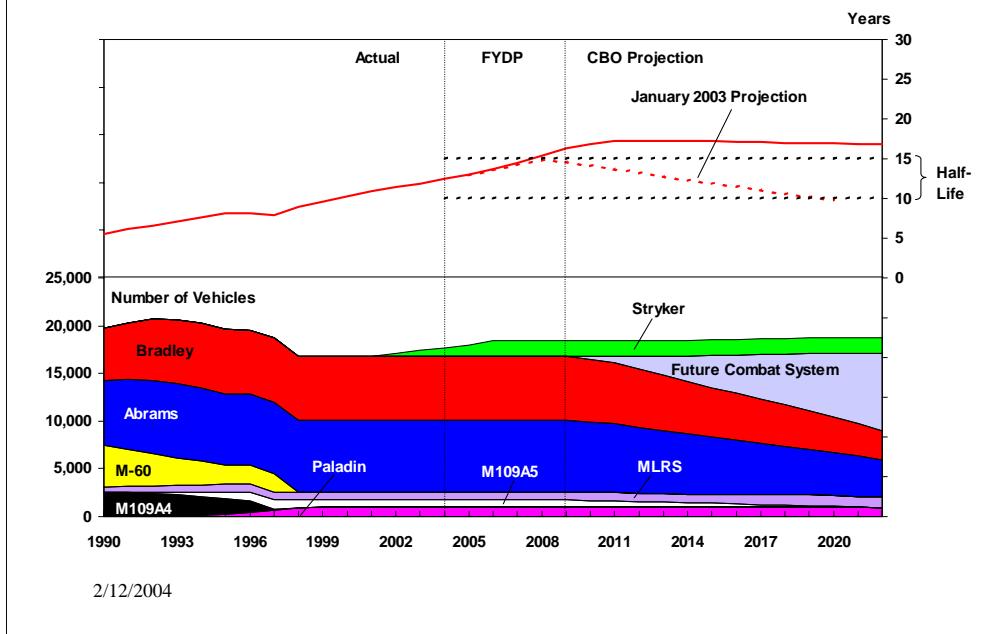
**Procurement of Army Ground Combat Vehicles**



- This chart updates the two panels of Figure 3-4 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. (For an explanation of the steady-state ranges depicted in the chart, see Box 1-3 in the January 2003 study.)
- Purchases of ground combat vehicles (GCVs) during the 1990s averaged about 400 a year, less than half of the upper end of the steady-state purchase quantities that would sustain the fleet indefinitely.
- The Future Combat System (FCS) is a key element of the Army's transformation plans. By 2045, all of the Army's divisions would be equipped with elements of the FCS.
- The first FCS vehicles for the Army's divisions would be bought in 2009. The Army's current plan is that by 2011, the level of FCS purchases will be enough to equip two brigades a year.
- The Army's current plans differ from its 2003 plans:
  - Estimates made by the Army of the average unit costs for the elements of the FCS are now three times larger than the program's original cost goals.
  - Annual FCS purchases have been reduced by one-third, thereby doubling overall annual procurement costs.

**Figure 3-5 Updated.**

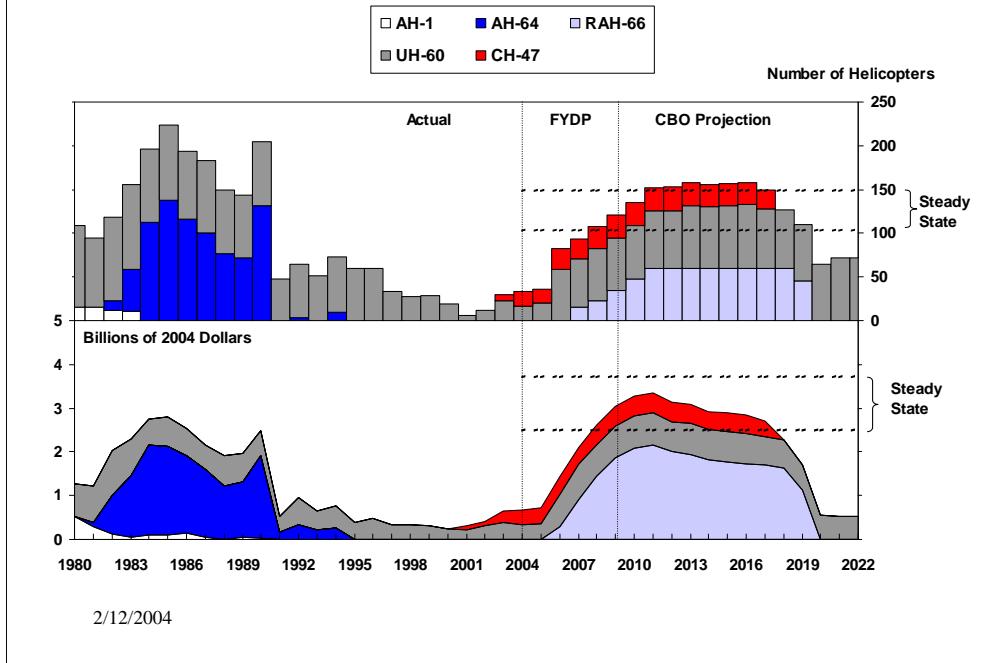
**Age and Inventory of Army Ground Combat Vehicles**



- This chart updates the two panels of Figure 3-5 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. (For an explanation of the half-life range shown in the chart, see Box 1-3 in the January 2003 study.) The chart shows the composition of the Army's ground combat vehicle fleet (the bottom part of the chart) and its average age (the red line at the top of the chart).
- The Army's GCV purchases have been insufficient to halt aging—the ground combat fleet's average age has risen steadily, reaching about 12 years in 2004, or about twice its age in 1990.
- Deliveries of new vehicles will not be sufficient to arrest age growth until 2011, when the average age of the fleet should stabilize at about 17 years with deliveries of the first FCS purchases. Although fleet aging halts at that point, for the rest of the projection period the average age is slightly above the upper bound of the target half-life range for ground combat vehicles.
- Those findings differ from the results of CBO's January 2003 analysis. In that study, the Army's fleet age is projected to decline rapidly between 2008 and 2020 instead of halting at an average of 17 years. That change occurs primarily because of the one-third reduction in projected annual FCS procurement and termination of the Bradley and Abrams upgrade programs.

**Figure 3-6 Updated.**

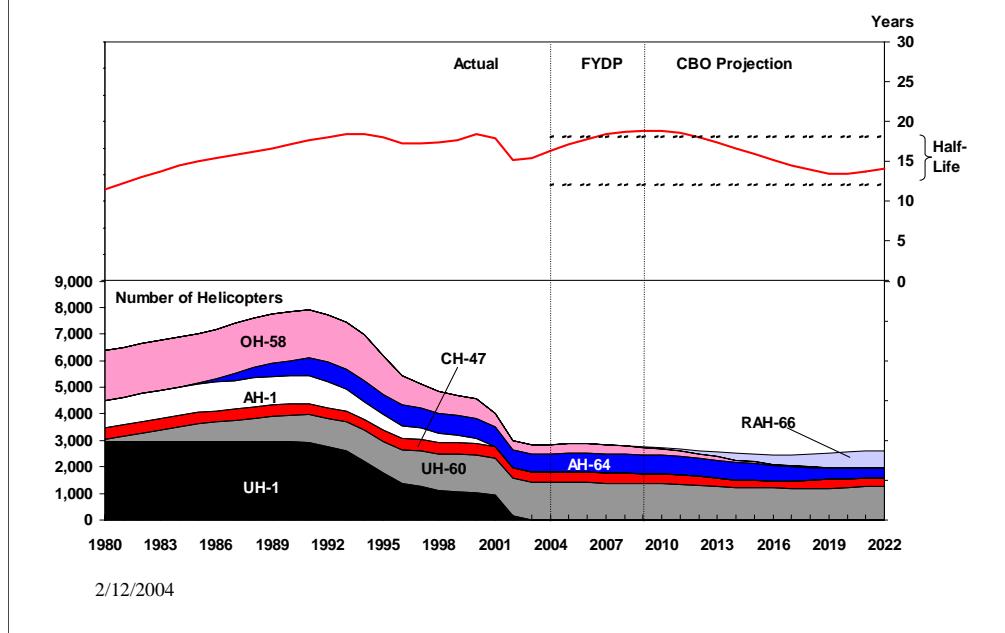
**Procurement of Army Helicopters**



- This chart updates the two panels of Figure 3-6 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. (For an explanation of the steady-state ranges depicted in the chart, see Box 1-3 in the January 2003 study.) The chart shows past and projected purchases of helicopters for the Army measured by the number of helicopters (the top part of the chart) and in billions of 2004 dollars (the bottom part of the chart).
- The Army plans to increase its annual purchases of new and refurbished helicopters almost fourfold, from 33 in 2004 to 121 by 2009. Annual purchases are slated to continue growing during the years of CBO's projection period, reaching 150 by 2011 and remaining at or above that level through 2017.
- Most of the increase in projected funding will go toward purchases of the RAH-66 Comanche scout helicopter beginning in 2007. Such purchases are projected to reach a peak of 60 aircraft a year in 2011 and remain at that level through 2018.
- Between 2003 and 2004, the Army made several changes to its plans for procuring helicopters:
  - Total Comanche procurement was reduced from 1,250 helicopters to 650;
  - Long-range plans for a Future Transport Rotorcraft were abandoned; and
  - The UH-60X, an improved version of the existing Blackhawk helicopter, was chosen as the Army's Future Utility Rotorcraft.

**Figure 3-7 Updated.**

**Age and Inventory of Army Helicopters**

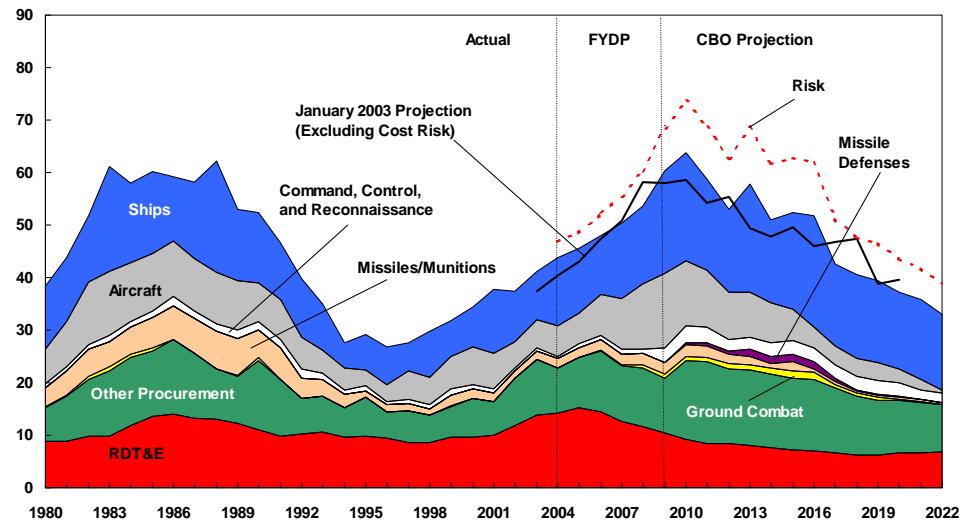


- This chart updates the two panels of Figure 3-7 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. (For an explanation of the half-life range shown in the chart, see Box 1-3 in the January 2003 study.) The chart shows the age (top part of the chart) and inventory (bottom part of the chart) of the Army's attack and utility helicopters.
- Although the Army has bought few helicopters recently and does not anticipate large annual purchases through 2009, the helicopter fleet's average age remains within or close to the target half-life range. Helicopter fleets are only about a third as big as they were in the 1980s and 1990s, and the equipment retirements that have brought this about have also kept average ages down.
- Beginning around 2010, projected deliveries of the new Comanche reconnaissance helicopter and of upgraded and new utility helicopters cause the average age of the fleet to stabilize and then begin to decline.

**Figure 3-9 Updated.**

**Past and Projected Navy and Marine Corps Spending for Investment**

(Billions of 2004 Dollars of Obligational Authority)



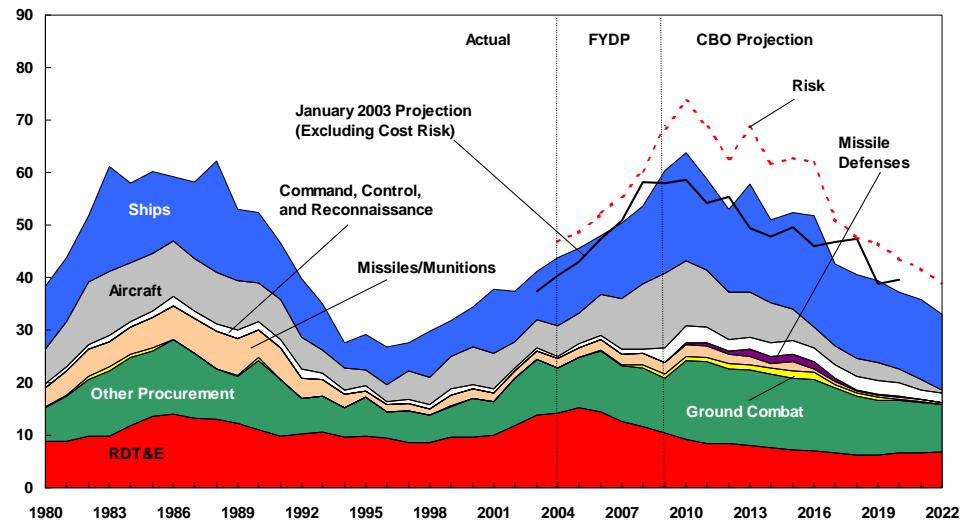
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- This chart updates Figure 3-9 in CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. The 2004 FYDP and CBO's current projection through 2016 envision providing greater investment resources to the Department of the Navy (which includes the Marine Corps) than did the 2003 FYDP and CBO's January 2003 projection.
- Current plans would increase Navy investment from \$44 billion in 2004 to a peak of about \$64 billion in 2010.
- After that time, investment resources would gradually decline to \$33 billion by 2022, averaging about \$47 billion a year between 2010 and 2022.
- If costs grow as they have in the past, however, the Navy's investment spending could rise to a peak of about \$74 billion in 2010, average \$56 billion a year between 2010 and 2022, and then fall back to about \$39 billion by the end of the period.

**Figure 3-9 Updated (Continued).**

**Past and Projected Navy and Marine Corps Spending for Investment**

(Billions of 2004 Dollars of Obligational Authority)

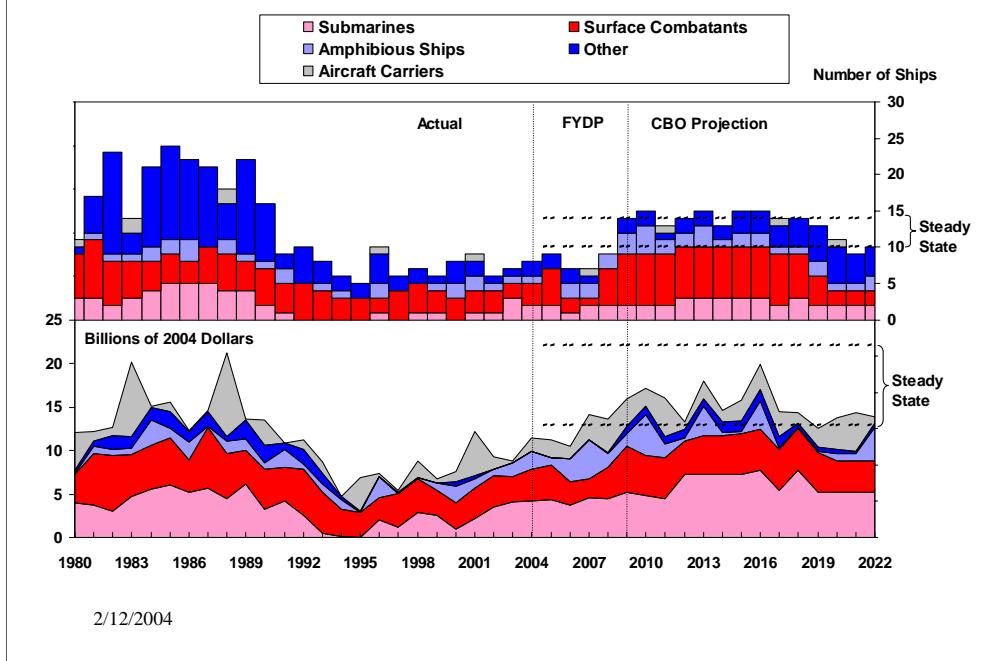


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- Between 2004 and 2009, the Navy's planned annual shipbuilding grows from 8 to 14 ships a year.
- The Navy and Marine Corps now plan to integrate their tactical aircraft forces more fully, resulting in less need for new planes than CBO projected in January 2003.
  - That change effectively reduces projected purchases of tactical aircraft by about 500 planes over the next two decades, which in turn reduces projected investment resources after 2016.
  - The reduction in purchases occurs primarily in the Joint Strike Fighter program.
- The Marine Corps's plans for items purchased through its procurement account changed little between the 2003 and 2004 FYDPs.
  - Plans to invest heavily in ground combat vehicles (such as the new Expeditionary Fighting Vehicle and the Future Light Combat Vehicle) to replace the service's current inventory of aging equipment will require substantial resources over the next 20 years.

**Figure 3-10 Updated.**

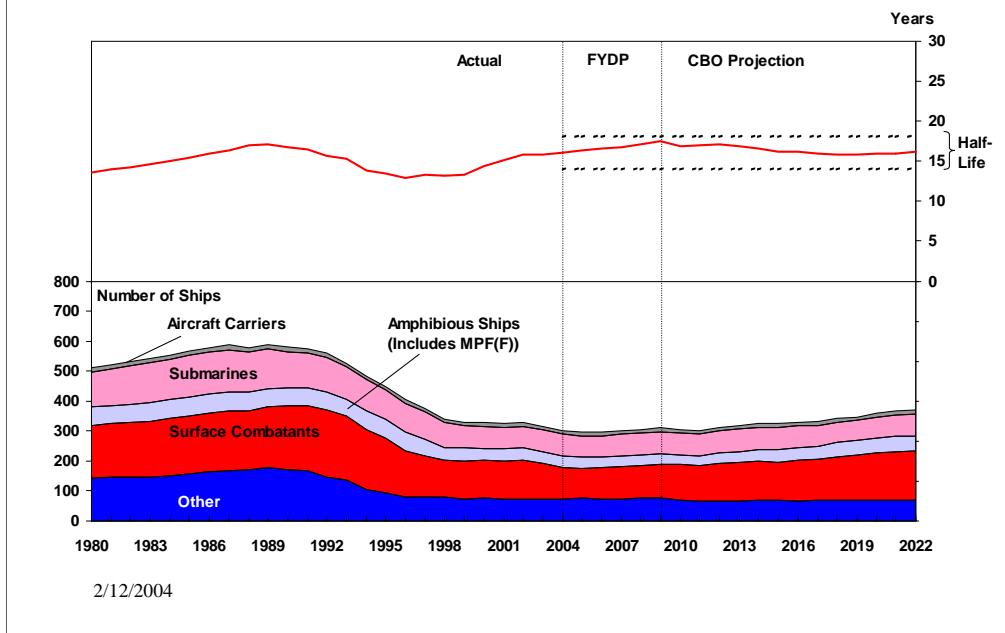
**Procurement of Battle Force Ships**



- This chart updates the two panels of Figure 3-10 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. (For an explanation of the steady-state ranges depicted in the chart, see Box 1-3 in the January 2003 study.) The chart shows past and projected purchases of battle force ships for the Navy measured by the number of ships (the top part of the chart) and in billions of 2004 dollars (the bottom part of the chart).
- CBO's projection anticipates increasing ship purchases. Those purchases are a result of the Navy's plan to enlarge the fleet from about 300 ships today to 370 ships by 2022.
- Between 2004 and 2009, the Navy's annual shipbuilding program almost doubles in size, to a rate of 14 ships a year.
  - Most of the planned increase occurs in the surface combatant force.
  - Increases in desired capabilities for LHA(R) and MPF(F) amphibious ships also contribute to increased funding for shipbuilding.

**Figure 3-11 Updated.**

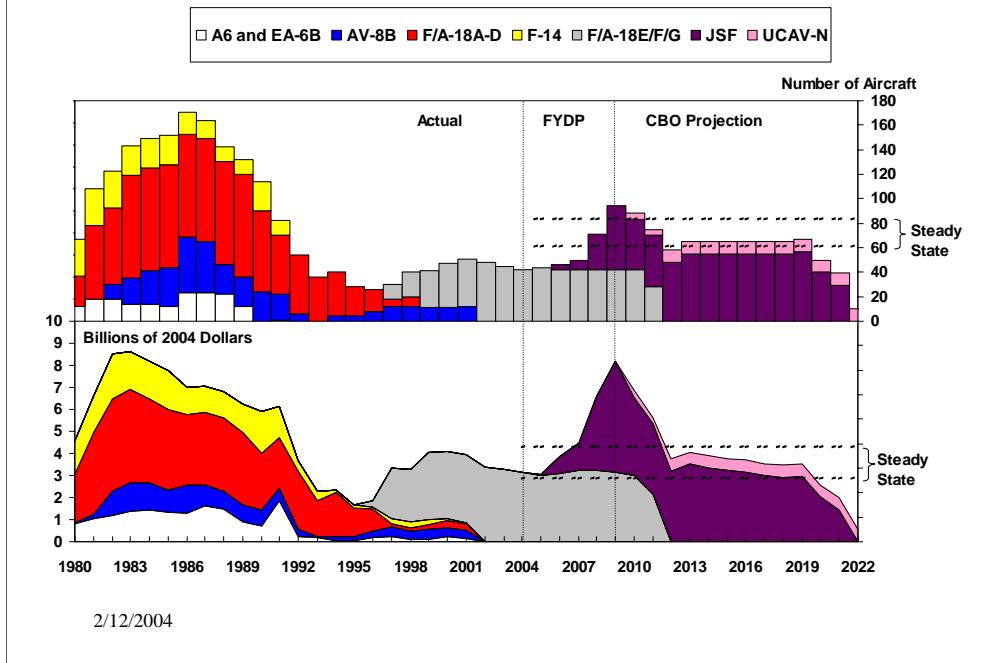
**Age and Inventory of Battle Force Ships**



- This chart updates the two panels of Figure 3-11 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. (For an explanation of the half-life range depicted in the chart, see Box 1-3 in the January 2003 study.) The chart shows the age (top part of the chart) and inventory (bottom part of the chart) of the Navy's battle force ships.
- Beyond 2009, the average age of the Navy's ship fleet is projected to remain stable at 14 to 15 years, which is comparable with what CBO projected in January 2003—an average age within the target half-life value of 14 to 18 years.
- Planned purchases of the new Littoral Combatant Ship (LCS) account for much of the increase in inventory and reduction in average fleet age.

**Figure 3-12 Updated.**

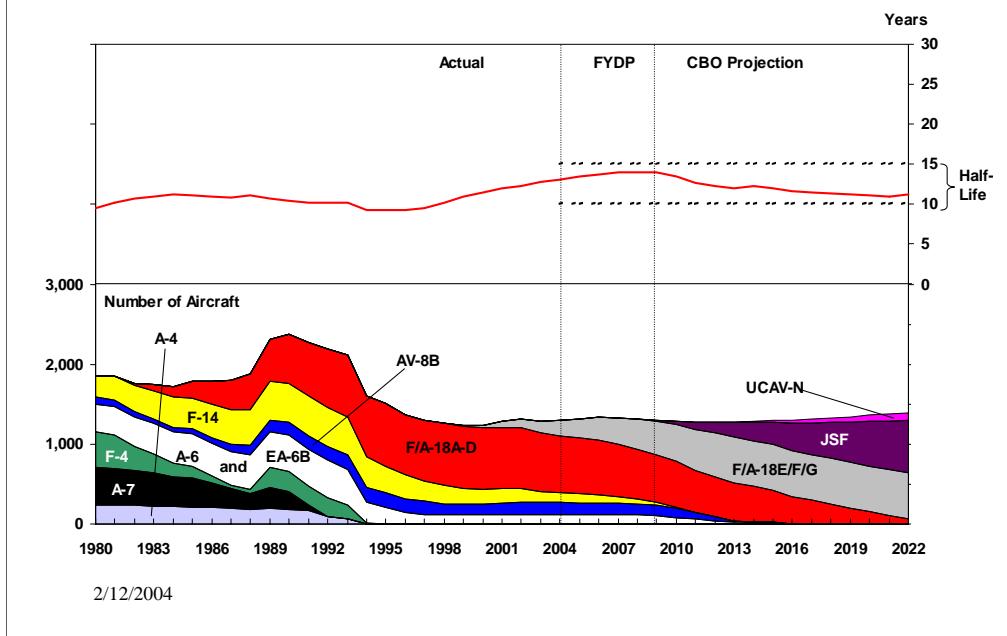
**Procurement of Navy Fighter and Attack Aircraft**



- This chart updates the two panels of Figure 3-12 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. (For an explanation of the steady-state ranges depicted in the chart, see Box 1-3 in the January 2003 study.) The chart shows past and projected purchases of fighter and attack aircraft for the Navy measured by the number of aircraft (the top part of the chart) and in billions of 2004 dollars (the bottom part of the chart).
- The Navy's and Marine Corps's plans to more fully integrate their tactical aviation fleet result in less demand for purchases of new planes than in CBO's January 2003 projection.
- Average spending on tactical fighter procurement will average \$4 billion a year (without cost risk) in the 2004-2022 period, CBO projects.

**Figure 3-13 Updated.**

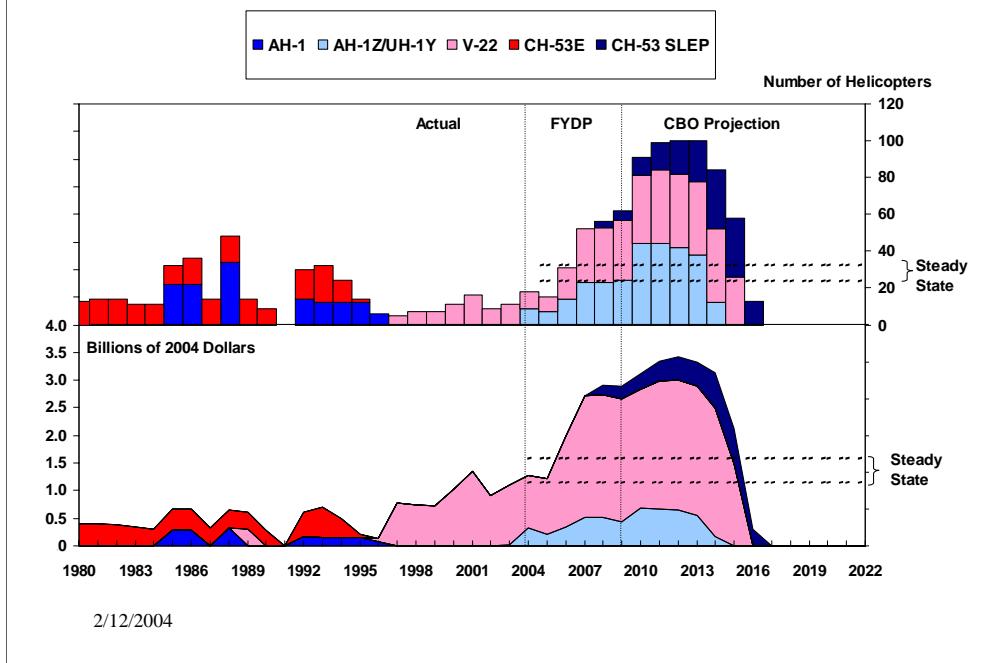
**Age and Inventory of Navy Fighter and Attack Aircraft**



- This chart updates the two panels of Figure 3-13 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. (For an explanation of the half-life range depicted in the chart, see Box 1-3 in the January 2003 study.) The chart shows the age (top part of the chart) and inventory (bottom part of the chart) of the Navy's fighter and attack aircraft.
- Beyond 2009, the average age of the Navy's tactical aircraft fleet is projected to remain stable at 11 to 12 years.
  - In CBO's January 2003 projection, the tactical aircraft fleet's average age declined to less than 10 years by 2020.
  - The increase in projected age in CBO's current estimate is a result of the Navy-Marine Corps tactical aviation integration plan.
- Notwithstanding that increase, the average age of the Navy's fighter and attack aircraft fleet would be within the target half-life value of 10 to 15 years throughout the period of CBO's projection.

**Figure 3-14 Updated.**

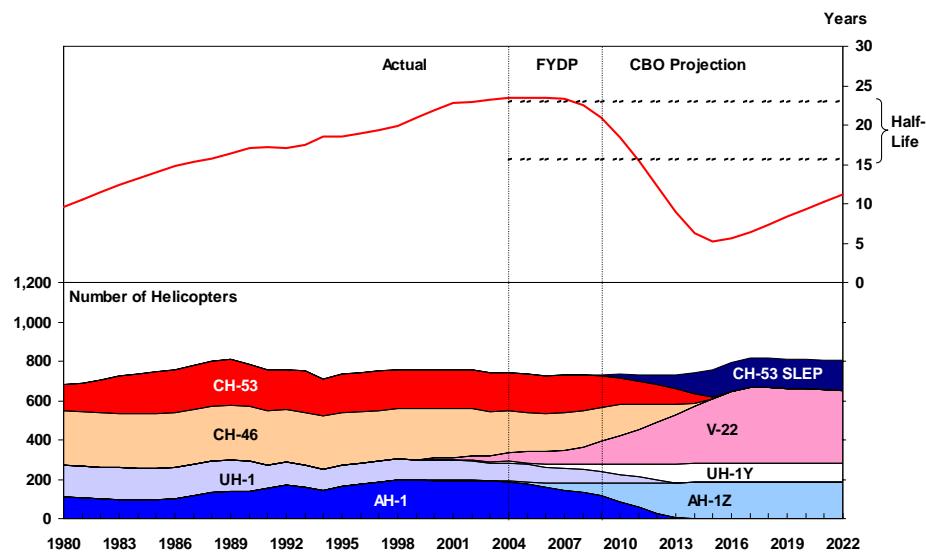
**Procurement of Marine Corps Helicopters**



- This chart updates the two panels of Figure 3-14 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. (For an explanation of the steady-state ranges depicted in the chart, see Box 1-3 in the January 2003 study.) The chart shows past and projected purchases of helicopters for the Marine Corps measured by the number of helicopters (the top part of the chart) and in billions of 2004 dollars (the bottom part of the chart).
- CBO's January 2003 projection replaced the CH-53E helicopter with a new CH-53X. CBO's updated projection, which is based on the Marine Corps's current plans, does not replace the CH-53E with a new helicopter; rather, it assumes the implementation of a service-life extension program for the existing fleet beginning in 2008 and ending in 2016.
- There are no other significant changes in the projection. Procurement of the V-22 tilt-rotor transport to replace the existing CH-46 fleet accounts for the majority of the funding projected for purchases of Marine Corps helicopters.

**Figure 3-15 Updated.**

**Age and Inventory of Marine Corps Helicopters**

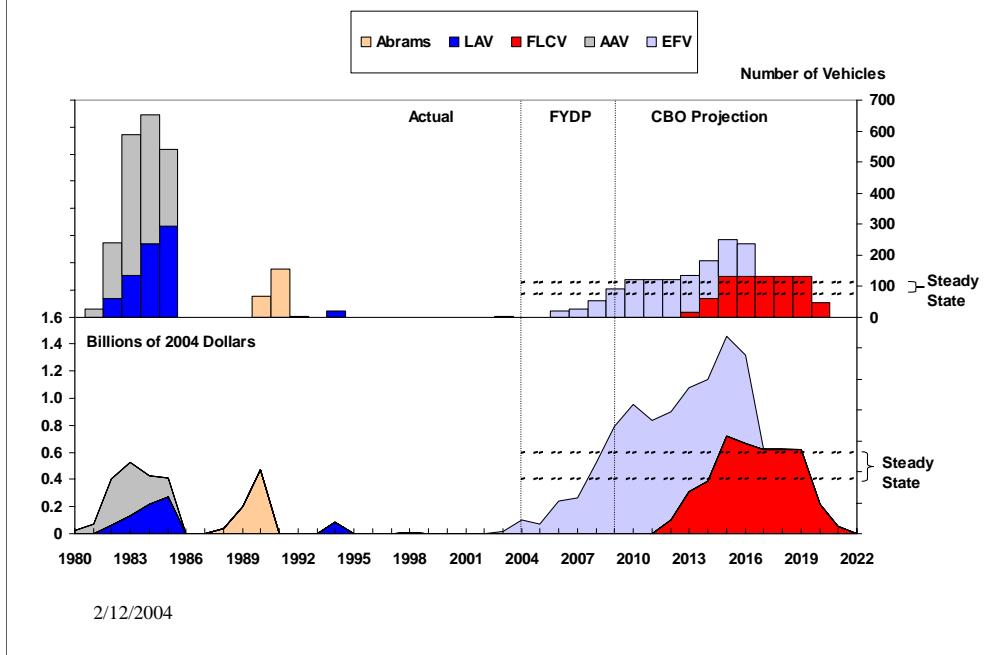


2/12/2004

- This chart updates the two panels of Figure 3-15 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. (For an explanation of the half-life range depicted in the chart, see Box 1-3 in the January 2003 study.) The chart shows the age (top part of the chart) and inventory (bottom part of the chart) of helicopters for the Marine Corps.
- As in CBO's January 2003 study, the current projection envisions that the average age of the Marine Corps's helicopter fleet declines rapidly beginning in 2008 with increasing deliveries of rebuilt and upgraded utility and attack helicopters and deliveries of the V-22.

**Figure 3-16 Updated.**

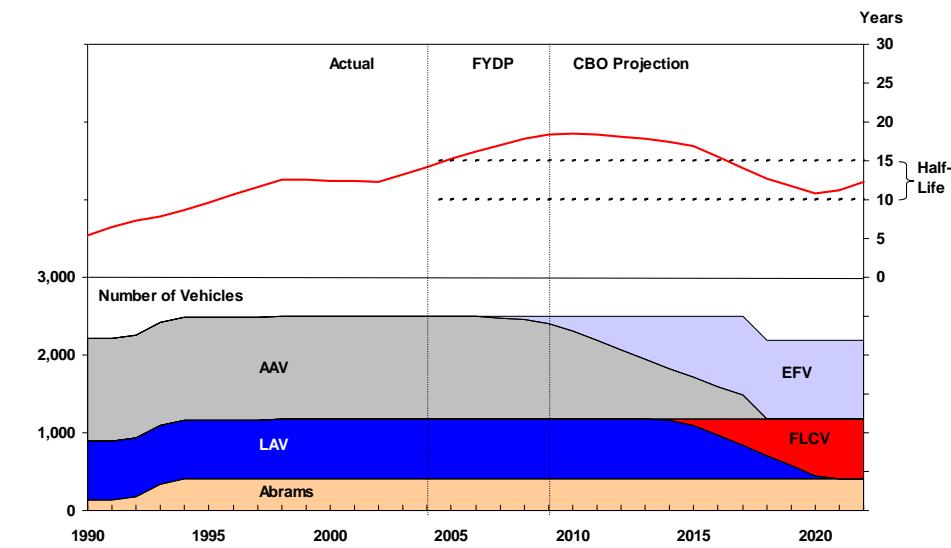
**Procurement of Marine Corps Ground Combat Vehicles**



- This chart updates the two panels of Figure 3-16 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. (For an explanation of the steady-state ranges depicted in the chart, see Box 1-3 in the January 2003 study.) The chart shows past and projected purchases of ground combat vehicles for the Marine Corps measured by the number of vehicles (the top part of the chart) and in billions of 2004 dollars (the bottom part of the chart).
- There are no significant changes between CBO's January 2003 projection and its updated estimates. Projected purchases of the new Expeditionary Fighting Vehicle (EFV), which will replace the existing fleet of Amphibious Assault Vehicles (AAVs), account for the majority of procurement funding for the Marine Corps's ground combat vehicles.

**Figure 3-17 Updated.**

**Age and Inventory of Marine Corps Ground Combat Vehicles**



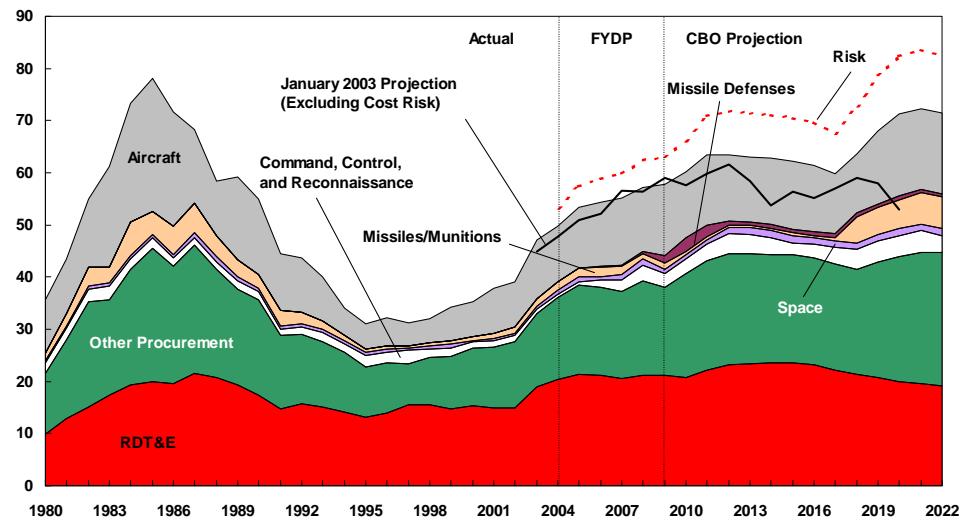
2/12/2004

- This chart updates the two panels of Figure 3-17 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. (For an explanation of the half-life range depicted in the chart, see Box 1-3 in the January 2003 study.) The chart shows the age (top part of the chart) and inventory (bottom part of the chart) of ground combat vehicles for the Marine Corps.
- There are no significant changes, relative to CBO's January 2003 estimates, in the age or inventory of ground combat vehicles.

**Figure 3-19 Updated.**

**Past and Projected Air Force Spending for Investment**

(Billions of 2004 Dollars of Obligational Authority)

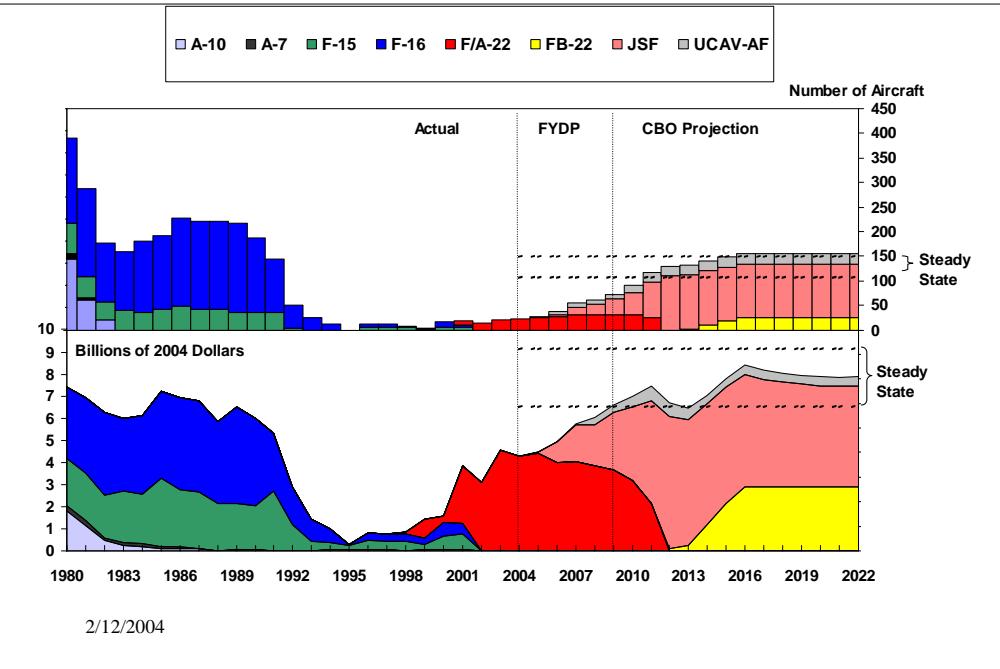


2/12/2004

- This chart updates Figure 3-19 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. The 2004 FYDP allocates an average of \$1 billion more per year in investment resources to the Department of the Air Force than the 2003 FYDP did. Air Force investment increases from \$50 billion in 2004 to \$58 billion in 2009.
- CBO projects sustained increases in purchases of new tactical aircraft, reflecting continued production of the F/A-22 fighter through 2011 and the beginning of production of the Joint Strike Fighter (JSF) in 2006.
- Between 2010 and 2020, Air Force investment is higher in CBO's current projection than it was in the previous one, averaging \$64 billion annually (or \$72 billion a year with historical cost growth).
  - Funding requirements for intelligence programs increased by about \$3 billion a year in the current projection.
  - Several other programs as well are now projected to have higher costs, including certain command and control and space programs.
- CBO projects that replacements for the current long-range bomber force and Minuteman III ICBM force will begin to be purchased in 2018. Those purchases cause the rise in projected investment resources that occurs at the end of the projection period.

**Figure 3-20 Updated.**

**Procurement of Air Force Fighter and Attack Aircraft**



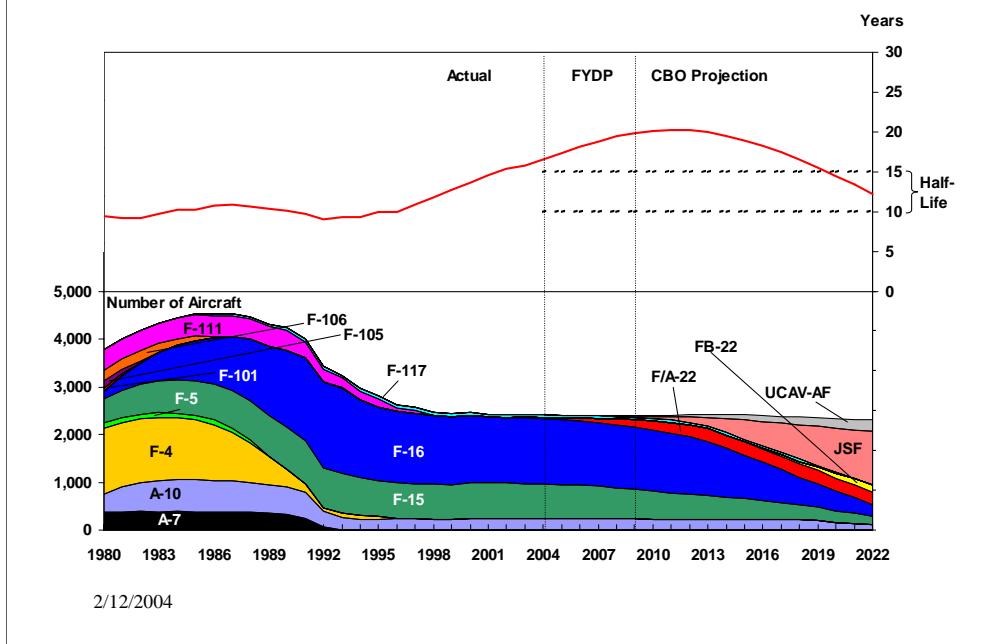
- This chart updates the two panels of Figure 3-20 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. (For an explanation of the steady-state ranges depicted in the chart, see Box 1-3 in the January 2003 study.) The chart shows past and projected purchases of fighter and attack aircraft for the Air Force measured by the number of aircraft (the top part of the chart) and in billions of 2004 dollars (the bottom part of the chart).

- F/A-22 unit costs have increased since the January 2003 projection, but DoD's total planned purchase has been reduced. Consequently, annual projected procurement costs are essentially unchanged from the previous projection.

- CBO projects that both purchases and procurement funding for tactical aircraft will fall within steady-state ranges beginning in 2011.

**Figure 3-21 Updated.**

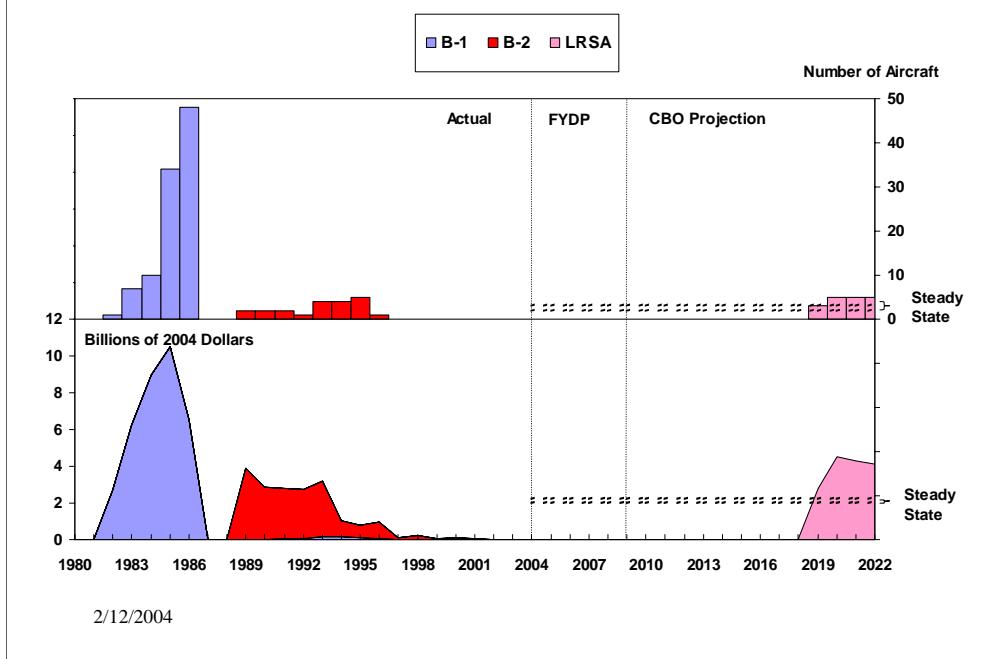
**Age and Inventory of Air Force Fighter and Attack Aircraft**



- This chart updates the two panels of Figure 3-21 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. (For an explanation of the half-life range depicted in the chart, see Box 1-3 in the January 2003 study.) The chart shows the age (top part of the chart) and inventory (bottom part of the chart) of fighter and attack aircraft for the Air Force.
- CBO's updated projection of the average age for Air Force tactical aircraft is similar to its January 2003 projection.
  - The fleet's average age falls within the target half-life range of 10 to 15 years in the final years of the projection period, once substantial numbers of the Joint Strike Fighter have been delivered.

**Figure 3-22 Updated.**

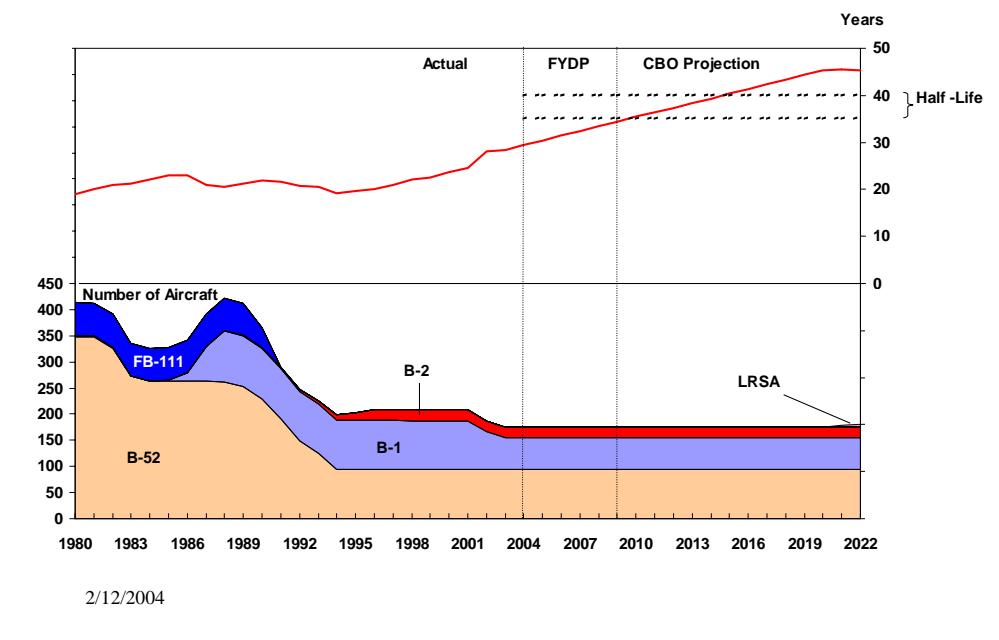
**Procurement of Air Force Bombers**



- This chart updates the two panels of Figure 3-22 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. (For an explanation of the steady-state ranges depicted in the chart, see Box 1-3 in the January 2003 study.) The chart shows past and projected purchases of bombers for the Air Force measured by the number of aircraft (the top part of the chart) and in billions of 2004 dollars (the bottom part of the chart).
- CBO projects that a new long-range strike aircraft (LRSA) will begin to be produced in 2019. The LRSA might either augment the existing fleet of B-52, B-1, and B-2 long-range bombers, or it might replace portions of the existing fleet. There are no significant changes relative to CBO's January 2003 projection.

**Figure 3-23 Updated.**

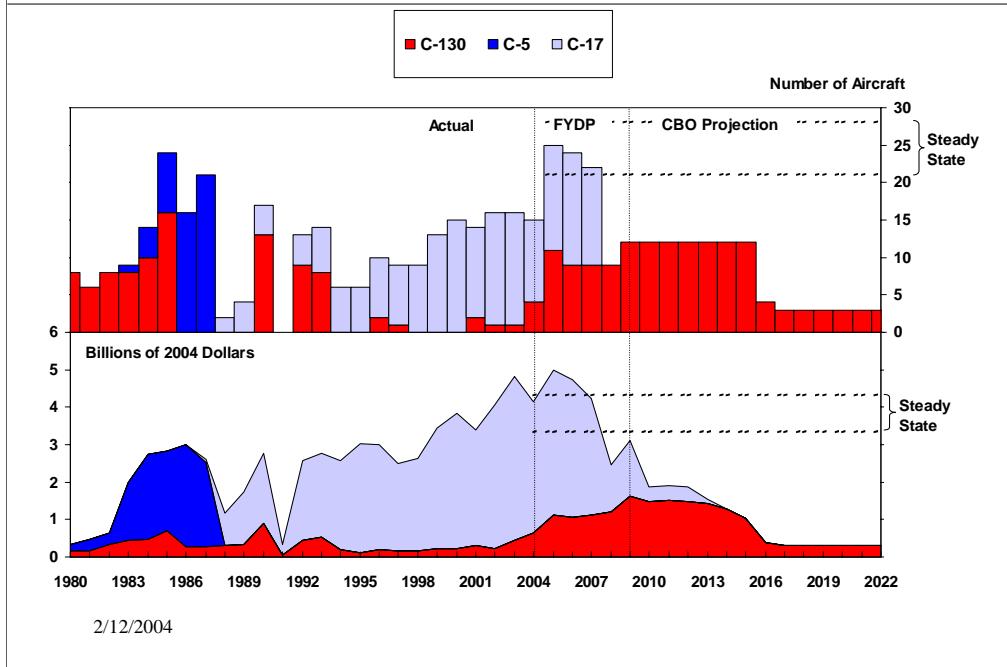
**Age and Inventory of Air Force Bombers**



- This chart updates the two panels of Figure 3-23 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. (For an explanation of the half-life range depicted in the chart, see Box 1-3 in the January 2003 study.) The chart shows the age (top part of the chart) and inventory (bottom part of the chart) of bombers for the Air Force.
- There are no significant changes relative to CBO's January 2003 projection.

**Figure 3-24 Updated.**

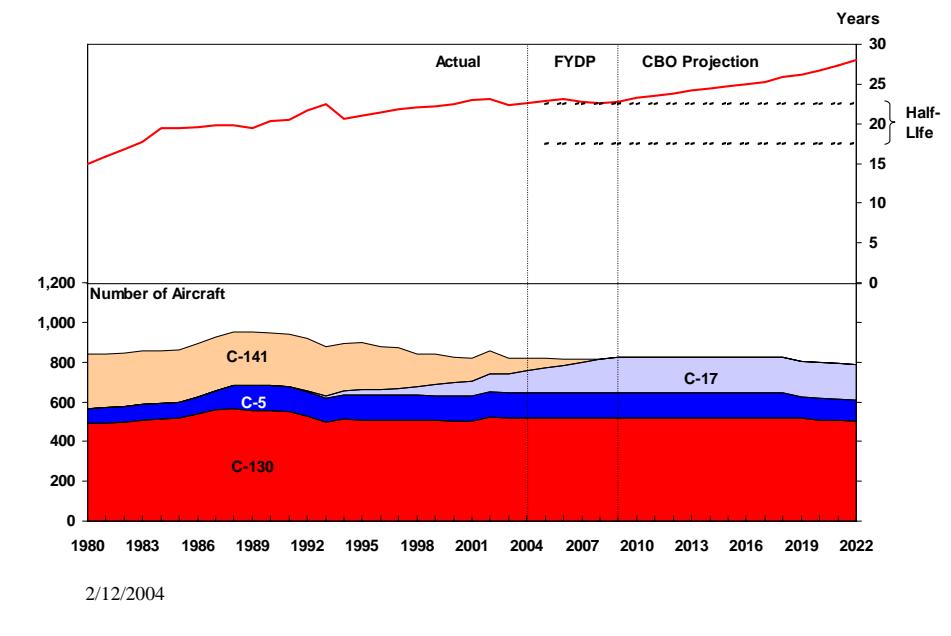
**Procurement of Air Force Airlifters**



- This chart updates the two panels of Figure 3-24 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. (For an explanation of the steady-state ranges depicted in the chart, see Box 1-3 in the January 2003 study.) The chart shows past and projected purchases of airlifters for the Air Force measured by the number of aircraft (the top part of the chart) and in billions of 2004 dollars (the bottom part of the chart).
- Purchases of C-130Js (the Air Force plans to buy 180 of the planes) are now projected to continue through 2022 rather than end after 2015. Otherwise, there are no significant changes relative to CBO's January 2003 projection.

**Figure 3-25 Updated.**

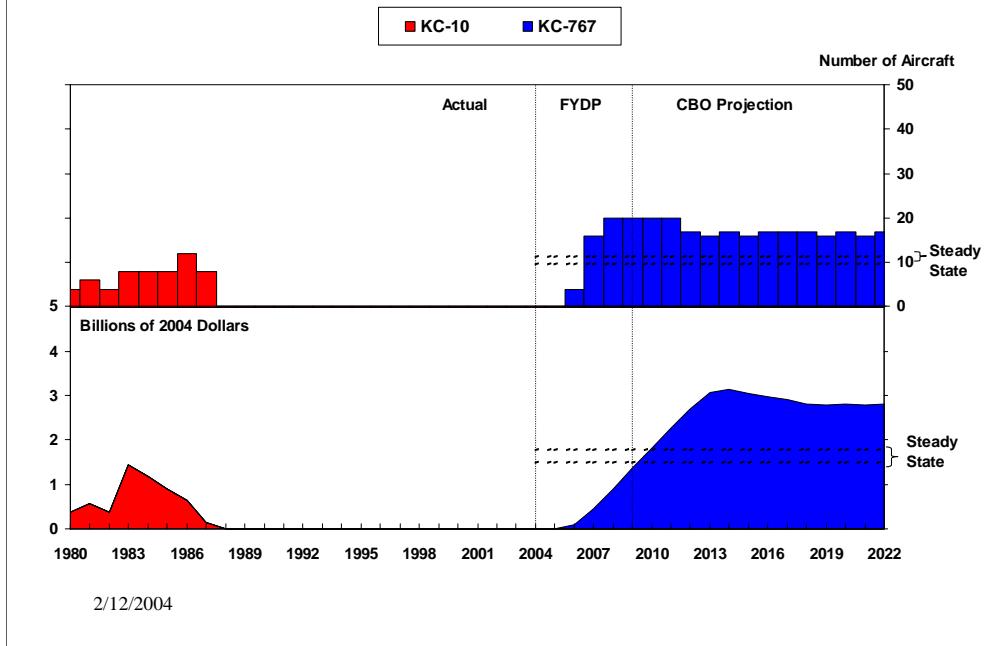
**Age and Inventory of Air Force Airlifters**



- This chart updates the two panels of Figure 3-25 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. (For an explanation of the half-life range depicted in the chart, see Box 1-3 in the January 2003 study.) The chart shows the age (top part of the chart) and inventory (bottom part of the chart) of airlifters for the Air Force.
- Although CBO projects that C-130J purchases will continue through 2022, the low annual rates at which those aircraft are purchased are expected to result in no significant change in the average age of the airlifter fleet relative to CBO's January 2003 projection.

**Figure 3-26 Updated.**

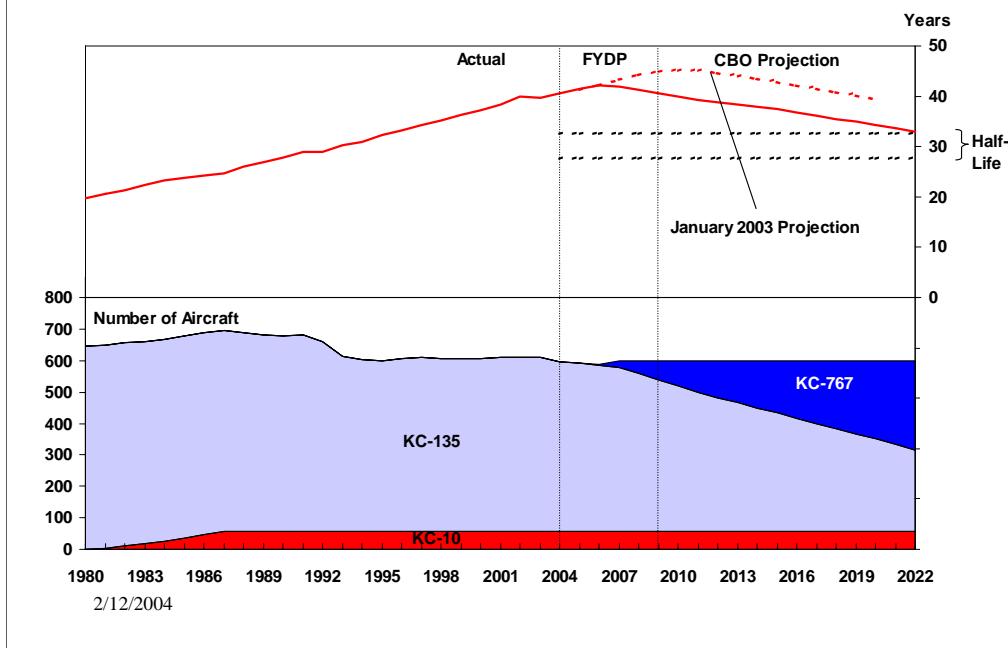
**Procurement of Air Force Tankers**



- This chart updates the two panels of Figure 3-26 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. (For an explanation of the steady-state ranges depicted in the chart, see Box 1-3 in the January 2003 study.) The chart shows past and projected purchases of tankers for the Air Force measured by the number of aircraft (the top part of the chart) and in billions of 2004 dollars (the bottom part of the chart).
- CBO's January 2003 projection (which was based on the 2003 FYDP) assumed that new KC-767 tankers would be procured beginning in 2007. CBO now assumes (on the basis of the 2004 FYDP and DoD's plans, announced in 2003, for tanker leasing) that a program to lease new KC-767 tankers will begin in 2006.
- The updated projection assumes that leases will continue through (and beyond) 2022 until all existing tankers have been replaced with KC-767s.

**Figure 3-27 Updated.**

**Age and Inventory of Air Force Tankers**

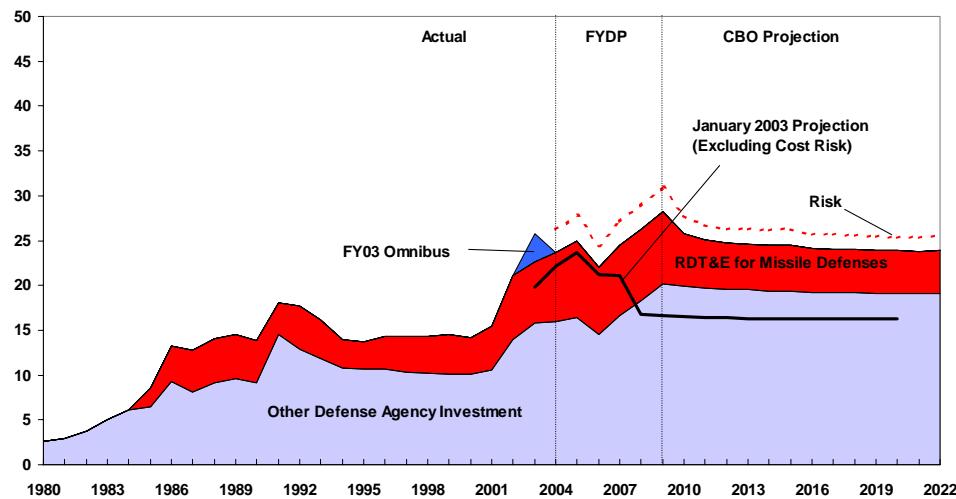


- This chart updates the two panels of Figure 3-27 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. (For an explanation of the half-life range depicted in the chart, see Box 1-3 in the January 2003 study.) The chart shows the age (top part of the chart) and inventory (bottom part of the chart) of tankers for the Air Force.
- The Defense Department's proposal to lease new KC-767 tankers would result in earlier delivery of those aircraft than would the purchases assumed in CBO's January 2003 projection. Thus, in CBO's updated projection, the average age of the tanker fleet begins to decline sooner than it does in CBO's January 2003 estimate.
- CBO's projection of the Air Force's investment includes DoD's previously announced plan to lease 100 KC-767 tankers to replace existing KC-135E tankers. Leasing is assumed to continue after the first 100 aircraft become operational until all KC-135 tankers are replaced with KC-767s.
- In response to Congressional concerns regarding the cost of leasing rather than purchasing aircraft, the Defense Department late in 2003 proposed a revised plan to lease 20 KC-767s and purchase the remaining 80 new tankers. However, CBO's projection was developed before DoD decided to pursue that revised program.

**Figure 3-29 Updated.**

**Past and Projected Investment Spending for Defense Agencies**

(Billions of 2004 Dollars of Obligational Authority)



2/12/2004

- This chart updates Figure 3-29 of CBO's January 2003 study of *The Long-Term Implications of Current Defense Plans*. The Defense Department's budget provides money for a variety of specialized agencies responsible for performing advanced research, developing missile defenses, overseeing special operations, and developing and managing information systems.
- The investment funding allocated to those activities in the 2004 FYDP averages about \$5 billion more per year for the 2004-2009 period than it did in the previous FYDP and in CBO's January 2003 projection. Under DoD's current plans, funding would increase from \$24 billion in 2004 to \$28 billion in 2009.
- CBO projects that if current plans were carried out, defense agencies would spend an average of \$24 billion a year on investment between 2010 and 2020 (excluding cost risk), up from an average of \$16 billion a year in CBO's previous projection. Most of that increase stems from:
  - CBO's assumption that funding allocated by DoD for transformation-related activities would remain at the 2009 level (about \$5 billion) through 2002, and;
  - CBO's assumption that funding allocated by DoD for work on land- and space-based interceptors for missile defense would continue at the 2009 level (about \$2.6 billion) through 2022.

**Appendix.****Abbreviations**

<b>AAV</b>	Amphibious Assault Vehicle
<b>EFV</b>	Expeditionary Fighting Vehicle
<b>DoD</b>	Department of Defense
<b>FB-22</b>	Fighter/Bomber-22 (CBO's proposed long-range interdictor replacement for the F-15E and F-117)
<b>FCS</b>	Future Combat System
<b>FLCV</b>	Future Light Combat Vehicle
<b>FYDP</b>	Future Years Defense Program
<b>GCV</b>	Ground Combat Vehicle
<b>ICBM</b>	Intercontinental Ballistic Missile
<b>JSF</b>	Joint Strike Fighter
<b>LAV</b>	Light Armored Vehicle
<b>LCS</b>	Littoral Combatant Ship
<b>LHA(R)</b>	Landing Helicopter Assault (Replacement) (Replacement for Tarawa Class Amphibious Assault Ships)
<b>LRSA</b>	Long-Range Strike Aircraft
<b>MPF(F)</b>	Maritime Prepositioning Force (Future)
<b>MLRS</b>	Multiple Launch Rocket System
<b>RDT&amp;E</b>	Research, Development, Testing, and Evaluation
<b>SLEP</b>	Service Life Extension Program
2/12/2004	<b>UCAV-AF</b> Unmanned Combat Air Vehicle-Air Force
	<b>UCAV-N</b> Unmanned Combat Air Vehicle-Navy